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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,165	08/10/2001	David J. Reimus	60,426-196 (2000P07841US0)	4627
24500	7590	12/04/2003	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY LAW DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			WONG, ALBERT KANG	
			ART UNIT	PAPER NUMBER
			2635	3
DATE MAILED: 12/04/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,165

Applicant(s)

REIMUS, DAVID J.

Examiner

Albert K Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. This Office action is in response to the application filed August 10, 2001. Claims 1-17 are pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill 6,225,873.

4. Regarding claim 1, the claimed signal source is taught as item 168 of Figure 10; the claimed oscillator with transistor having an emitter is shown as item 162; and the claimed antenna is shown as item 166. Figure 10 does not show the antenna directly coupled to the emitter of the oscillating circuit's transistor. The emitter is connected to a buffer circuit (item 164). One of ordinary skill in the art at the time of the invention would have a knowledge of various transmission circuits and antennas. It is clear from figure 10 that the oscillating signal from the emitter is driving the antenna. Figure 11 shows a similar configuration where the oscillator directly drives the antenna. It would have been obvious to one of ordinary skill in the art at the time of the invention that the buffer circuit is not a necessary component. While the buffer circuit reduces stray impedances and thus, is a more forgiving design, a proper design would eliminate the need for the additional circuit. In such a case, the emitter may be directly coupled to the antenna. Further, as evidenced by applicant's lack of disclosure regarding the need for a buffer circuit and means for providing the same functionality as said circuit, it is

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considered an admission that methods of providing the same functionality without the buffer circuit would have been known to one of ordinary skill in the art at the time of the invention.

Regarding claim 2, Hill does not teach a specific antenna. A simple conventional antenna is a microstrip which is a trace on a printed circuit board. It would have been obvious to select any suitable antenna including a microstrip.

Regarding claim 3, see col. 14, lines 50-55.

Regarding claim 4, the claimed first capacitive element in parallel with a resistive element both coupled between the emitter and ground is shown as R24 and C16 in Figure 10.

Regarding claim 5, the claimed second capacitive element in series with the first capacitive element is shown as C17 in Figure 10.

Regarding claim 6, the voltage source and inductive element is shown as V_{in} and L8 in Figure 10.

Regarding claim 8, col. 1 teaches the use of a transmitter in a remote keyless entry system and discusses the reception of a signal and the performance of an action, such as providing access. The transmitter has been discussed in claim 1.

Regarding claims 9-12, these limitations have been discussed in claims 2-6 above.

5. Claims 7 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill 6,225,873 in view of Handfield 5,731,516.

Regarding claim 7, Hill does not teach the use of a wheel as an antenna. Handfield teaches in col. 6, lines 25-35 the use of a wheel as an antenna. One of ordinary skill in the art would realize that the transmitter circuit in Hill is not limited to the particular use with a vehicle. Transmitters are found on a plurality of electronic devices including telemetry systems. In such

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systems it is recognized that the choice of antenna and oscillator circuits selected would be dependent on the particular use. It would have been obvious to use a wheel as an antenna as suggested by Handfield where the device has one available. The use of existing parts eliminates the need for an additional component.

Regarding claim 13, Hill teaches the concept of a signal source, an oscillator with a transistor and an antenna. As shown in claim 1, it would have been obvious to directly couple the antenna to the transistor emitter. The device in Hill is a remote control. Handfield teaches the claimed controller and sensor as items 24 and 30. One of ordinary skill in the art would understand that a signal source for a transmitter may be from a sensor or a human user. A transmitter is not limited to a particular signal source. It would have been obvious to combine the transmitter in Hill with the monitoring system in Handfield to gain the telemetry function as suggested by Handfield, or to gain the advantages of the using the simplistic transmitter in Hill.

Regarding claim 14, Handfield teaches in Figure 7 a valve stem that couple with the wheel. Although the wheel is stated as the primary antenna, one of ordinary skill in the art would recognize that the conductive valve stem also functions as an antenna.

Regarding claim 15, see col. 6, lines 25-35 of Handfield.

Regarding claim 16, see claim 1.

Regarding claim 17, the oscillator in Hill is a Colpitts oscillator.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hirsch teaches an example of a microstrip antenna formed on a substrate that is a printed circuit board. Sutton teaches a transmission system using an oscillator and an antenna. The oscillator and antenna are directly connected. Sutton teaches that for maximum power

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transfer, the impedance of the antenna must match the impedance of the oscillator. Sabet is an example of a printed antenna that is formed on a pcb. Widner teaches a telemetry system using the valve stem as an antenna.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert K Wong whose telephone number is 703-305-8884. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.



Albert K. Wong
November 14, 2003